

REMARKS

Applicants appreciate the detailed examination evidenced by the Final Office Action mailed August 4, 2005 (hereinafter "Final Action"). However, Applicants respectfully request that the Examiner reconsider the rejections of Claims 1-32 over the cited references for at least the reasons discussed below.

Independent Claims 1, 26-28, 31 and 32 Are Patentable Over Brezak and Ganesan

Independent Claims 1, 26-28, 31, and 32 stand rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent Application Publication No. 2003/0018913 to Brezak et al. (hereinafter "Brezak") in view of U.S. Patent 5,535,276 to Ganesan (hereinafter "Ganesan"). Claim 1 recites:

A method for a middle-tier server to impersonate a client to a plurality of servers, the method comprising:
obtaining a common nonce associated with each of the plurality of servers from an entity other than the client or the plurality of servers;
providing the common nonce to the client;
receiving the common nonce signed by the client at the middle-tier server; and
providing the signed common nonce as a signature for transactions from the client to the plurality of servers so as to authenticate the client to the plurality of servers. (*Emphasis added*).

The Final Action asserts that Brezak discloses all of the recitations of Claim 1 with the exception of "the client signing the common nonce (service ticket)", which the Final Action asserts is disclosed by Ganesan. *See* Final Action, Page 2, line 21 to Page 3, line 4. As such, the Final Action appears to assert that the service ticket of Brezak is equivalent to "a common nonce associated with each of the plurality of servers", as recited by Claim 1. *See* Final Action, Page 2, lines 21 to 24. Applicants respectfully disagree.

Brezak appears to be directed to controlling delegation of authentication credentials, such as a client's ticket granting ticket (TGT), by providing a service ticket including a "forwardable flag" that indicates that the client has authorized the delegation. *See* Brezak, Paragraph 0046. More particularly, as described in the cited portions of Brezak, "[w]hen client 202 wants to access server A 210, the client sends a ticket granting service request (TGS_REQ) message 224 to authentication service 206, which returns a ticket granting

service reply (TGS_REP) message **226**. TGS_REP message **226** includes *a service ticket associated with client 202 and server A 210.* (Emphasis added). See Brezak, Paragraph 0043. In other words, the service ticket in the message **226** appears to be associated with only *one* server, *i.e.*, the server A **210**.

Brezak also describes a second service ticket that is provided by the authentication server **206**. In particular, Brezak states, "[i]f authentication service **206** determines that server A **210** is allowed to delegate to the targeted server/service, then a TGS_REP message **232** is sent to server A **210**. TGS_REP message **232** includes a service ticket *for the targeted server/service.*" (Emphasis added). See Brezak, Paragraph 0048. As such, the service ticket in the message **232** appears to be associated with a *single* targeted server, for example, "the desired or targeted server/service to which client **202** is seeking access, e.g., server C **214**." See Brezak, Paragraph 0045.

In contrast, Claim 1 recites "a common nonce associated with *each of the plurality of servers*". As an initial matter, Applicants submit that the cited portions of Brezak do not appear to disclose or suggest a "nonce", as recited in Claim 1 and defined in the present specification. Moreover, even if one of the service tickets of Brezak were to be considered a nonce, none of the service tickets appear to be associated with a plurality of servers. Rather, each of the service tickets described in Brezak appear to be issued by the authentication service **206** for use with a *single* server. More specifically, as noted above, the service ticket included in the message **226** is associated with server A **210**, while the service ticket included in the message **232** is associated with a targeted server, such as server C **214**. As such, nowhere does Brezak appear to disclose or suggest *one* service ticket associated with a *plurality* of servers, such as servers A **210**, B **212**, C **214**, and D **216**. See Brezak, Figure 2. Accordingly, Applicants submit that Brezak does not appear to disclose or suggest "a common nonce associated with each of the plurality of servers", as recited by Claim 1.

Moreover, the Final Action does not appear to rely on Ganesan to disclose or suggest such a common nonce. See Final Action, Page 3. Rather, the Final Action relies on Ganesan to show that a message, including a ticket to access a server **50**, is encrypted/signed and then verified to authenticate the client to the server **50**. See Ganesan, Col. 5, lines 34-56 and Col.

15, lines 52-54.

Accordingly, the cited portions of Brezak and Ganesan do not appear to disclose or suggest "a common nonce associated with each of the plurality of servers", as recited by Claim 1. Thus, Applicants submit that Claim 1 is patentable over the combination of Brezak and Ganesan. Claims 26-28, 31, and 32 similarly recite such a common nonce, and are thus patentable for similar reasons. Also, dependent claims 2-25 and 29-30 are patentable at least per the patentability of Claims 1 and 28 from which they respectively depend.

In addition, Applicants note that independent Claims 1, 26, and 27 further recite "providing the signed common nonce...to the plurality of servers so as to authenticate the client to the plurality of servers." The Final Action asserts that Brezak discloses providing a common nonce to a plurality of servers at Paragraph 0055, lines 12-14. *See* Final Action, Page 3, lines 1-3. More particularly, the cited portion of Brezak states "[t]he received service ticket is then used in a subsequent S4U2proxy protocol/procedure to request a service ticket to server C 214 for client 302." *See* Brezak, Paragraph 0055, lines 12-14. In other words, the received service ticket appears to be provided to *one* server (*i.e.*, server C 214), rather than to a *plurality* of servers. As such, Brezak does not appear to disclose or suggest providing one service ticket, signed or otherwise, to "the plurality of servers so as to authenticate the client to the plurality of servers", as recited by Claims 1, 26, and 27. Nor does the Final Action rely on Ganesan to provide such a recitation. Accordingly, Applicants submit that Claims 1, 26, and 27 are also patentable over the combination of Brezak and Ganesan for at least these additional reasons.

Many of the Dependent Claims Are Separately Patentable

Applicants submit that dependent Claims 2-25 and 29-30 are patentable at least by virtue of the patentability of independent Claims 1 and 28 from which they respectively depend. Applicants further submit that several other of the dependent claims are also separately patentable. For example, Claim 23 recites, in part, "obtaining the common nonce from a party trusted by the middle-tier server and the plurality of servers, the common nonce being signed by the trusted party."

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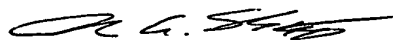
Brezak appears to disclose a trusted third party **204** which provides a service ticket included in a message **232** to server A **210**. *See* Brezak, Figure 2. However, as discussed above, the service ticket in the message **232** from the trusted third party **204** does not appear to be "a common nonce" as recited by Claim 23, as it appears to be associated with only the targeted server, rather than with the plurality of servers A-D. *See* Brezak, Figure 2. As such, Brezak does not appear to disclose or suggest "obtaining the common nonce from a party trusted by the middle-tier server and the plurality of servers", as recited by Claim 23.

Moreover, the cited portions of Ganesan also do not appear to disclose or suggest obtaining a common nonce from a trusted third party. Accordingly, Applicants submit that the combination of Brezak and Ganesan does not disclose or suggest all of the recitations of Claim 23. As such, Claim 23 is independently patentable over Brezak and Ganesan for at least these reasons. In addition, as Claim 29 similarly recites that "the common nonce is provided by a trusted third party", Applicants further submit that Claim 29 is independently patentable over the combination of Brezak and Ganesan for at least similar reasons.

Conclusion

Accordingly, Applicants submit that the rejections of Claims 1-32 are overcome for at least the reasons discussed above, and that the claims are, therefore, in condition for allowance, which is respectfully requested. Applicants encourage the Examiner to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,



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